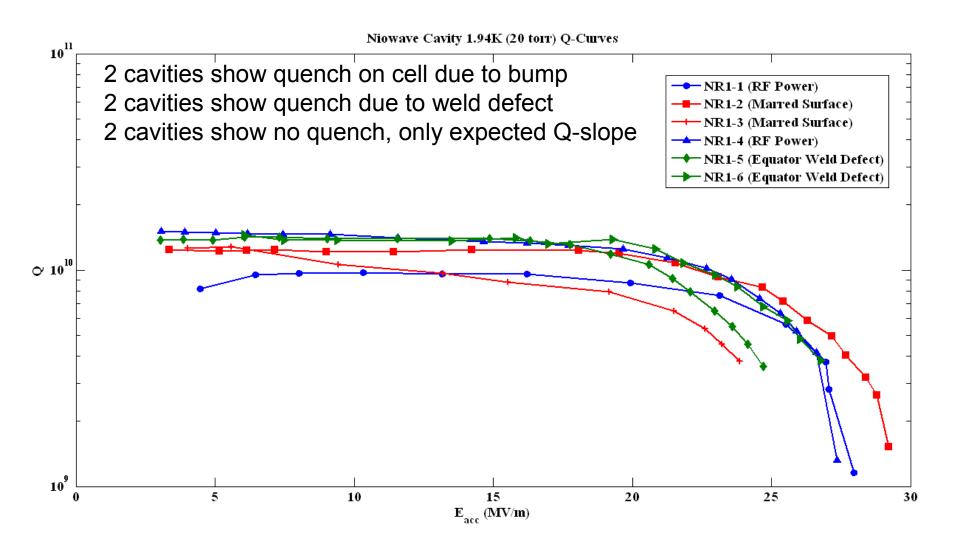
### For Mark Champion

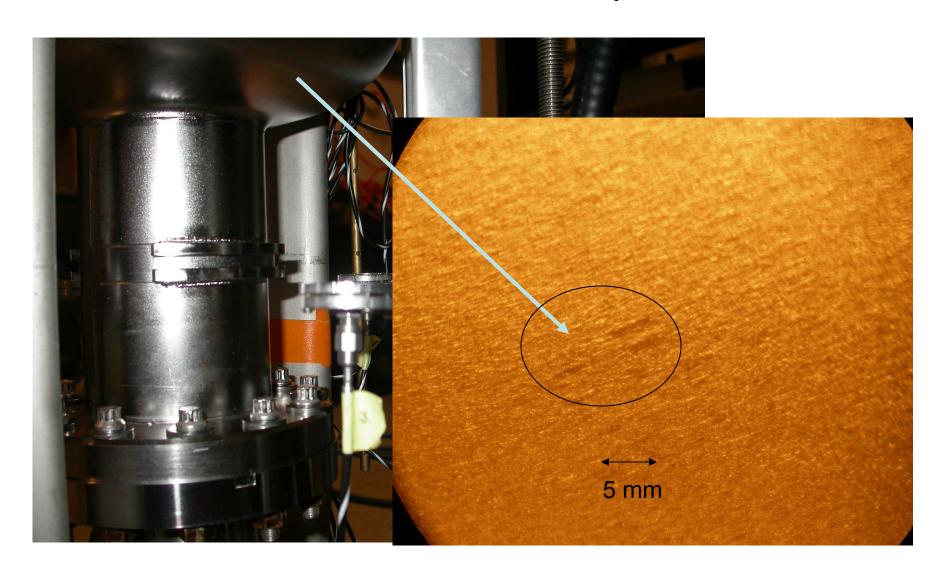
### Niowave Cavites Preparation

Niowave Cavity	BCP (1:1:2) Etch	Q <sub>0</sub> (1.94 K)	Peak E <sub>acc</sub>	Q at Peak E <sub>acc</sub>	Field Limit
NR1-1	85 mm	8.2 e 9	27.9 MV/m	1.2 e 9	RF Power
NR1-2	113 mm	1.2 e 10	29.2 MV/m	1.5 e 9	Marred Surface Picture shown
NR1-3	60 mm	1.3 e 10	23.8 MV/m	3.8 e 9	Marred Surface Picture shown
NR1-4	254 mm	1.5 e 10	27.4 MV/m	1.3 e 9	RF Power
NR1-5	184 mm	1.4 e 10	24.7 MV/m	3.6 e 9	Equator Weld Defect Picture shown
NR1-6	205 mm	1.5 e 10	26.8 MV/m	3.8 e 9	Equator Weld Defect No picture yet

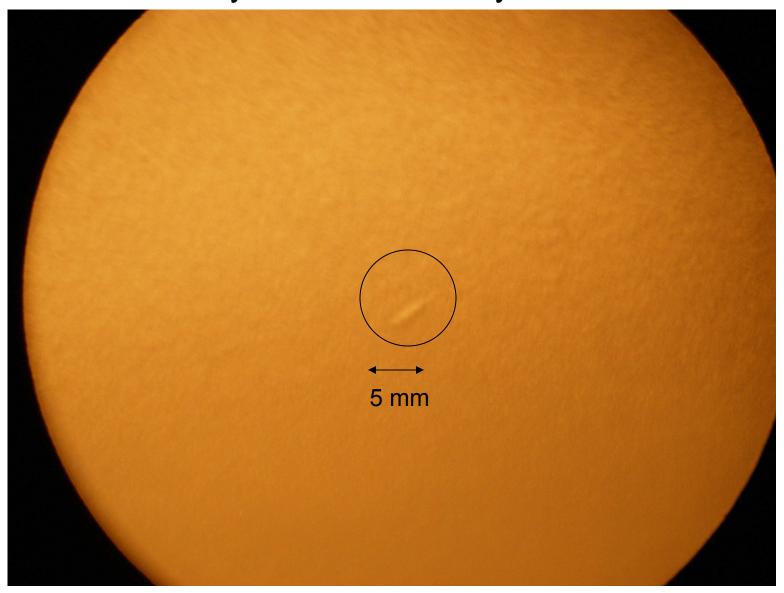
#### Q vs E curves : Six Niowave/Roark, 1-cell cavities



# Defect Found in Cavity #3 with 2<sup>nd</sup> Sound Detection and Questar Inspection



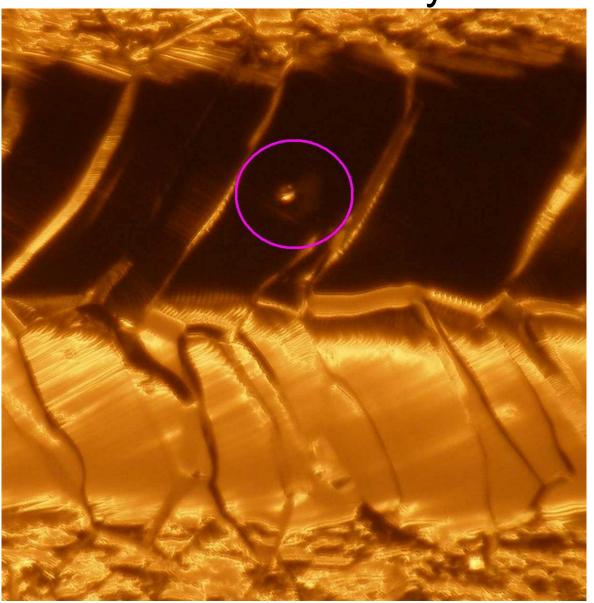
## Defect found with 2<sup>nd</sup> Sound and inspection by Questar on Cavity # 2



#### Related Defect on Die at Niowave



# Pit on Weld found with 2<sup>nd</sup> Sound in Cavity # 5



Pit size = 100  $\mu$ m